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| 10/751,400      | 01/06/2004  | Cheng-Hwa Cheng      | 4444-0132P          | 3194             |

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EXAMINER

SAVAGE, MATTHEW O

|          |              |
|----------|--------------|
| ART UNIT | PAPER NUMBER |
|----------|--------------|

1724

DATE MAILED: 05/31/2005

Please find below and/or attached an Office communication concerning this application or proceeding.

## Office Action Summary

Application No.

10/751,400

Applicant(s)

CHENG, CHENG-HWA

Examiner

Matthew O. Savage

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-- The MAILING DATE of this communication appears on the cover sheet with the correspondence address --  
**Period for Reply**

A SHORTENED STATUTORY PERIOD FOR REPLY IS SET TO EXPIRE 3 MONTH(S) FROM THE MAILING DATE OF THIS COMMUNICATION.

- Extensions of time may be available under the provisions of 37 CFR 1.136(a). In no event, however, may a reply be timely filed after SIX (6) MONTHS from the mailing date of this communication.
- If the period for reply specified above is less than thirty (30) days, a reply within the statutory minimum of thirty (30) days will be considered timely.
- If NO period for reply is specified above, the maximum statutory period will apply and will expire SIX (6) MONTHS from the mailing date of this communication.
- Failure to reply within the set or extended period for reply will, by statute, cause the application to become ABANDONED (35 U.S.C. § 133). Any reply received by the Office later than three months after the mailing date of this communication, even if timely filed, may reduce any earned patent term adjustment. See 37 CFR 1.704(b).

### Status

- 1) ☐ Responsive to communication(s) filed on \_\_\_\_.
- 2a) ☐ This action is **FINAL**. 2b) ☒ This action is non-final.
- 3) ☐ Since this application is in condition for allowance except for formal matters, prosecution as to the merits is closed in accordance with the practice under *Ex parte Quayle*, 1935 C.D. 11, 453 O.G. 213.

### Disposition of Claims

- 4) ☒ Claim(s) 1-14 is/are pending in the application.
- 4a) Of the above claim(s) \_\_\_\_ is/are withdrawn from consideration.
- 5) ☐ Claim(s) \_\_\_\_ is/are allowed.
- 6) ☒ Claim(s) 1-14 is/are rejected.
- 7) ☐ Claim(s) \_\_\_\_ is/are objected to.
- 8) ☐ Claim(s) \_\_\_\_ are subject to restriction and/or election requirement.

### Application Papers

- 9) ☐ The specification is objected to by the Examiner.
- 10) ☐ The drawing(s) filed on \_\_\_\_ is/are: a) ☐ accepted or b) ☐ objected to by the Examiner.  
Applicant may not request that any objection to the drawing(s) be held in abeyance. See 37 CFR 1.85(a).  
Replacement drawing sheet(s) including the correction is required if the drawing(s) is objected to. See 37 CFR 1.121(d).
- 11) ☐ The oath or declaration is objected to by the Examiner. Note the attached Office Action or form PTO-152.

### Priority under 35 U.S.C. § 119

- 12) ☐ Acknowledgment is made of a claim for foreign priority under 35 U.S.C. § 119(a)-(d) or (f).
- a) ☐ All b) ☐ Some \* c) ☐ None of:
1. ☐ Certified copies of the priority documents have been received.
2. ☐ Certified copies of the priority documents have been received in Application No. \_\_\_\_.
3. ☐ Copies of the certified copies of the priority documents have been received in this National Stage application from the International Bureau (PCT Rule 17.2(a)).
- \* See the attached detailed Office action for a list of the certified copies not received.

### Attachment(s)

- 1) ☒ Notice of References Cited (PTO-892)
- 2) ☐ Notice of Draftsperson's Patent Drawing Review (PTO-948)
- 3) ☐ Information Disclosure Statement(s) (PTO-1449 or PTO/SB/08)  
Paper No(s)/Mail Date \_\_\_\_.
- 4) ☐ Interview Summary (PTO-413)  
Paper No(s)/Mail Date. \_\_\_\_.
- 5) ☐ Notice of Informal Patent Application (PTO-152)
- 6) ☐ Other: \_\_\_\_.

The drawings are objected to under 37 CFR 1.83(a). The drawings must show every feature of the invention specified in the claims. Therefore, the sensors recited in claim 11 must be shown or the feature(s) canceled from the claim(s). No new matter should be entered.

Corrected drawing sheets in compliance with 37 CFR 1.121(d) are required in reply to the Office action to avoid abandonment of the application. Any amended replacement drawing sheet should include all of the figures appearing on the immediate prior version of the sheet, even if only one figure is being amended. The figure or figure number of an amended drawing should not be labeled as "amended." If a drawing figure is to be canceled, the appropriate figure must be removed from the replacement sheet, and where necessary, the remaining figures must be renumbered and appropriate changes made to the brief description of the several views of the drawings for consistency. Additional replacement sheets may be necessary to show the renumbering of the remaining figures. Each drawing sheet submitted after the filing date of an application must be labeled in the top margin as either "Replacement Sheet" or "New Sheet" pursuant to 37 CFR 1.121(d). If the changes are not accepted by the examiner, the applicant will be notified and informed of any required corrective action in the next Office action. The objection to the drawings will not be held in abeyance.

The disclosure is objected to because of the following informalities:

on line 17 of page 5, "present" should be changed to --prevent--;

on line 18 of page 5, --being—should be inserted after "from".

Appropriate correction is required.

The following is a quotation of the first paragraph of 35 U.S.C. 112:

The specification shall contain a written description of the invention, and of the manner and process of making and using it, in such full, clear, concise, and exact terms as to enable any person skilled in the art to which it pertains, or with which it is most nearly connected, to make and use the same and shall set forth the best mode contemplated by the inventor of carrying out his invention.

Claims 1-14 are rejected under 35 U.S.C. 112, first paragraph, as failing to comply with the enablement requirement. The claim(s) contains subject matter which was not described in the specification in such a way as to enable one skilled in the art to which it pertains, or with which it is most nearly connected, to make and/or use the invention.

With respect to the specification and claims, it is unclear as to how liquid is piped or transported through the system since no means or structure for causing such a function is disclosed in the specification or recited in the claims.

The following is a quotation of 35 U.S.C. 103(a) which forms the basis for all obviousness rejections set forth in this Office action:

(a) A patent may not be obtained though the invention is not identically disclosed or described as set forth in section 102 of this title, if the differences between the subject matter sought to be patented and the prior art are such that the subject matter as a whole would have been obvious at the time the invention was made to a person having ordinary skill in the art to which said subject matter pertains. Patentability shall not be negated by the manner in which the invention was made.

Claims 1-14 are rejected under 35 U.S.C. 103(a) as being unpatentable over Nagao et al in view of Schevey.

With respect to claim 1, Nagao et al disclose a first system (see FIG. 1) including a first tank 2 capable of storing a chemical liquid therein and a first filter 6 connecting

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with the first tank by a first tube 5 and a second tube 9, a third tube 13, a second system including a second tank 14 and a second filter 18 connecting with the second tank by a fourth tube 17 and a fifth tube 21, wherein the third tube 13 connects the first system with the second system, and a second vent tube 25 connecting with the second system. Nagao et al fail to specify the first vent tube connecting with the first system. Schevey discloses an analogous system including vent tube 5 connecting with a system and suggests that such a means pressure or vacuum from being created in the container or tank 1. It would have been obvious to have modified the system of Nagao et al so as to have included a first vent tube as suggested by Schevey in order to prevent pressure or vacuum from being created in the tank 2.

As to claim 2, Schevey disclose the first vent tube as transporting a gas into said first system.

Concerning claim 3, Nagao et al disclose the first tube 5 as being capable of piping chemical liquid from the first tank to the first filter.

As to claim 4, Nagao et al disclose the second tube pipe 9 as being capable of piping the chemical liquid from the first filter 6 to the first tank 2.

Regarding claim 5, Nagao et al disclose the second tube 9 as being capable of transporting a gas from the first filter 6 to the first tank 2.

Concerning claim 6, Nagao et al disclose the third tube 13 as being capable of piping the chemical liquid from the first system to said second system.

As to claim 7, Nagao et al disclose the fourth tube 17 as being capable of piping chemical liquid from the second tank 14 to the second filter 18.

Regarding claim 8, Nagao et al disclose the fifth tube 21 as being capable of piping the chemical liquid from the second filter 18 to the second tank 14.

Concerning claim 9, Nagao et al disclose the second vent tube 25 as being capable of piping chemical liquid from the second system.

As to claim 10, Nagao et al disclose a plurality of valves being set on said tubes (e.g., for example, valves 8, 12).

Regarding claim 11, Schevey disclose a plurality of sensors 25, 37 for sensing a quality of said chemical liquid.

With respect to claim 12, Nagao et al fail to specify a third vent tube for transporting a gas into the second tank. Schevey discloses an analogous system including vent tube 5 connecting with a tank 1 and suggests that such a means pressure or vacuum from being created in the tank 1. It would have been obvious to have modified the system of Nagao et al so as to have included a third vent tube as suggested by Schevey in order to prevent pressure or vacuum from being created in the tank 14.

With respect to claim 13, Nagao et al disclose a first tank capable 2 of storing a chemical liquid therein, a first filter 6 connecting with the first tank by a first tube 5 and a second tube 9, a second tank 14 connecting with the first filter by a third tube 13, a second filter 18 connecting with the second tank by a fourth tube 17, and a second vent tube 25 connecting with the second filter. Nagao et al fail to specify a first vent tube connecting with the first tank. Schevey discloses an analogous system including vent tube 5 connecting with a tank 1 and suggests that such a means pressure or vacuum

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from being created in the tank 1. It would have been obvious to have modified the system of Nagao et al so as to have included a first vent tube as suggested by Schevey in order to prevent pressure or vacuum from being created in the tank 2.

With respect to claim 14, Nagao et al fail to specify a third vent tube for transporting a gas into the second tank. Schevey discloses an analogous system including vent tube 5 connecting with a tank 1 and suggests that such a means pressure or vacuum from being created in the tank 1. It would have been obvious to have modified the system of Nagao et al so as to have included a third vent tube as suggested by Schevey in order to prevent pressure or vacuum from being created in the tank 14.

Any inquiry concerning this communication or earlier communications from the examiner should be directed to Matthew O. Savage whose telephone number is (571) 272-1146. The examiner can normally be reached on Monday-Friday, 7:00am-3:30pm.

If attempts to reach the examiner by telephone are unsuccessful, the examiner's supervisor, Duane Smith can be reached on (571) 272-1166. The fax phone number for the organization where this application or proceeding is assigned is 703-872-9306.

Information regarding the status of an application may be obtained from the Patent Application Information Retrieval (PAIR) system. Status information for published applications may be obtained from either Private PAIR or Public PAIR. Status information for unpublished applications is available through Private PAIR only. For more information about the PAIR system, see <http://pair-direct.uspto.gov>. Should you have questions on access to the Private PAIR system, contact the Electronic Business Center (EBC) at 866-217-9197 (toll-free).

*M. Savage*  
Matthew O Savage  
Primary Examiner  
Art Unit 1724

mos  
May 26, 2005